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## Underwater Gamma Spectroscopy

### ***Problem***

The INEEL's Integrated Spent Nuclear Fuels Program needed to characterize unidentified objects found during deactivation of water-filled spent fuel storage pools.

### ***Baseline Technology***

Removal of unidentified objects from storage pools for destructive or non-destructive analysis.

### ***Innovative Technology***

The INEEL-developed Underwater Gamma Spectroscopy gauge is a watertight gamma-ray spectrometer used for non-destructive analysis of unidentified objects in storage pools.

### ***Comparison***

This device characterizes the radiological properties of unidentified objects without removing them from underwater pools.

### ***Benefits***

This device enabled the program to segregate objects managed as spent nuclear fuel from those managed as radioactive waste. It also enhanced worker safety by leaving radioactive objects in pools during analysis.

SPENT NUCLEAR FUEL PROGRAM

Project: ID-SNF-102  
Integrated Spent Nuclear Fuel Program

